

André van Renssen

PERSONAL DATA

National Institute of Informatics
JST, ERATO, Kawarabayashi Large Graph Project
Tokyo, Japan
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WORK EXPERIENCE

OCT. 2015 -	Assistant Professor National Institute of Informatics JST, ERATO Kawarabayashi Large Graph Project Tokyo, Japan
SEPT. 2014 - SEPT. 2015	Postdoctoral Researcher National Institute of Informatics JST, ERATO Kawarabayashi Large Graph Project Tokyo, Japan

EDUCATION

SEPT. 2010 - AUG. 2014	PhD Computer Science Carleton University, Canada Thesis: <i>Theta-Graphs and Other Constrained Spanners</i> Supervisors: Dr. Prosenjit Bose, Dr. Vida Dujmović, and Dr. Pat Morin <i>Awarded the Senate Medal for Outstanding Academic Achievement on the Doctoral Level</i>
SEPT. 2008 - AUG. 2010	M.Sc. Computer Science & Engineering Technische Universiteit Eindhoven (Eindhoven University of Technology), the Netherlands Thesis: <i>The 2×2 Simple Packing Problem</i> Supervisor: Dr. Bettina Speckmann Graduated with honors, having an average grade of 8.89 out of 10
SEPT. 2005 - AUG. 2008	B.Sc. Computer Science Technische Universiteit Eindhoven (Eindhoven University of Technology), the Netherlands Graduated with honors, having an average grade of 8.00 out of 10

TEACHING EXPERIENCE

CARLETON UNIVERSITY

MAR. 2014 | *Guest lecturer* for COMP 5408 - Advanced Data Structures

TECHNISCHE UNIVERSITEIT EINDHOVEN

SEPT. 2009 - JAN. 2010	Logic and Set Theory <i>Grading homework assignments</i>
SEPT. 2008 - JAN. 2009	Logic and Set Theory <i>Grading homework assignments</i>

SCHOLARSHIPS

SEPT. 2010 - AUG. 2014	President's 2010 Doctoral Fellowship (\$ 15 000 per year)
SEPT. 2010 - AUG. 2014	Research Assistantship (\$ 10 000 per year)

SEPT. 2010	-	AUG. 2014	Departmental Scholarship (\$ 5 000 per year)
		DEC. 2013	David and Rachel Epstein Foundation Scholarship (\$ 1 000)
		DEC. 2013	Maureen Anne and Guljee Ismaily Scholarship (\$ 396)
		APR. 2013	David and Rachel Epstein Foundation Scholarship (\$ 1 000)
		APR. 2012	W.B. McDermid Holbein Memorial Scholarship (\$ 3 868)
FEB. 2009	-	JAN. 2010	Honors Program (€ 5 000)
			<i>The Honors Program allows some of the best students to participate in research projects within three different groups of the computer science department. In my case, these groups were algorithms, visualization, and real-time systems. In my year, only 6 of 105 Master's students were chosen.</i>

PUBLICATIONS

As customary in theoretical computer science, authors are sorted by their last name (except paper 76).

CURRENTLY UNDER REVIEW

1. *Constrained Generalized Delaunay Are Plane Spanners*
P. Bose, J.-L. De Carufel, and A. van Renssen.
Submitted to Computational Geometry: Theory and Applications (CGTA).
2. *Fully-Dynamic and Kinetic Conflict-Free Coloring of Intervals with Respect to Points*
M. de Berg, T. Leijssen, A. Markovic, A. van Renssen, M. Roeloffzen, and G. Woeginger.
Submitted to International Journal of Computational Geometry & Applications (IJCGA) special issue of ISAAC 2017.
3. *Faster Algorithms for Growing Prioritized Disks and Rectangles*
H.-K. Ahn, S. W. Bae, J. Choi, M. Korman, W. Mulzer, E. Oh, J.-w. Park, A. van Renssen, and A. Vigneron.
Submitted to Computational Geometry: Theory and Applications (CGTA).
4. *Routing in Polygonal Domains*
B. Banyassady, M.-K. Chiu, M. Korman, W. Mulzer, A. van Renssen, M. Roeloffzen, P. Seiferth, Y. Stein, B. Vogtenhuber, and M. Willert.
Submitted to Computational Geometry: Theory and Applications (CGTA) special issue of EuroCG 2017.
5. *Constrained Routing Between Non-Visible Vertices*
P. Bose, M. Korman, A. van Renssen, and S. Verdonschot.
Submitted to Algorithmica special issue of COCOON 2017.
6. *Balanced Line Separators of Unit Disk Graphs*
P. Carmi, M.-K. Chiu, M. Katz, M. Korman, Y. Okamoto, A. van Renssen, M. Roeloffzen, T. Shiitada, and S. Smorodinsky.
Submitted to Computational Geometry: Theory and Applications (CGTA).
7. *Dynamic Graph Coloring*
L. Barba, J. Cardinal, M. Korman, S. Langerman, A. van Renssen, M. Roeloffzen, and S. Verdonschot.
Submitted to Algorithmica.
8. *Improved Time-Space Trade-offs for Computing Voronoi Diagrams*
B. Banyassady, M. Korman, W. Mulzer, A. van Renssen, M. Roeloffzen, P. Seiferth, and Y. Stein.
Submitted to Journal of Computational Geometry (JoCG).
9. *On Plane Constrained Bounded-Degree Spanners*
P. Bose, R. Fagerberg, A. van Renssen, and S. Verdonschot.
Submitted to Algorithmica.
10. *Packing Short Plane Spanning Trees in Complete Geometric Graphs*
O. Aichholzer, T. Hackl, M. Korman, A. Pilz, G. Rote, A. van Renssen, M. Roeloffzen, and B. Vogtenhuber.
Submitted to Computational Geometry: Theory and Applications (CGTA).

11. *Symmetric Assembly Puzzles are Hard, Beyond a Few Pieces*
E. D. Demaine, M. Korman, J. S. Ku, J. Mitchell, Y. Otachi, A. van Renssen, M. Roeloffzen, R. Uehara, and Y. Uno.
Submitted to Computational Geometry: Theory and Applications (CGTA).
12. *Spanning Properties of Yao and Θ -Graphs in the Presence of Constraints*
P. Bose and A. van Renssen.
Submitted to International Journal of Computational Geometry & Applications (IJCGA).

JOURNAL PAPERS

13. *Time-Space Trade-offs for Triangulations and Voronoi Diagrams*
M. Korman, W. Mulzer, A. van Renssen, M. Roeloffzen, P. Seiferth, and Y. Stein.
Accepted to Computational Geometry: Theory and Applications (CGTA) special issue of EuroCG 2015.
14. *Continuous Yao Graphs*
D. Bakhshesh, L. Barba, P. Bose, J.-L. De Carufel, M. Damian, R. Fagerberg, M. Farshi, A. van Renssen, P. Taslakian, and S. Verdonschot.
Computational Geometry: Theory and Applications (CGTA), 67:42-52, 2018.
15. *Upper and Lower Bounds for Online Routing on Delaunay Triangulations*
N. Bonichon, P. Bose, J.-L. De Carufel, L. Perković, and A. van Renssen.
Discrete & Computational Geometry (DCG), 58(2):482-504, 2017.
16. *Competitive Local Routing with Constraints*
P. Bose, R. Fagerberg, A. van Renssen, and S. Verdonschot.
Journal of Computational Geometry (JoCG), 8(1):125-152, 2017.
17. *Time-Space Trade-offs for Triangulating a Simple Polygon*
B. Aronov, M. Korman, S. Pratt, A. van Renssen, and M. Roeloffzen.
Journal of Computational Geometry (JoCG), 8(1):105-124, 2017.
18. *On interference among moving sensors and related problems*
J.-L. De Carufel, M. Katz, M. Korman, A. van Renssen, M. Roeloffzen, and S. Smorodinsky.
Journal of Computational Geometry (JoCG), 8(1):32-46, 2017.
19. *Hanabi is NP-hard, Even for Cheaters who Look at Their Cards*
J.-F. Baffier, M.-K. Chiu, Y. Diez, M. Korman, V. Mitsou, A. van Renssen, M. Roeloffzen, and Y. Uno.
Theoretical Computer Science (TCS), 675:43-55, 2017.
20. *The Price of Order*
P. Bose, P. Morin, and A. van Renssen.
International Journal of Computational Geometry & Applications (IJCGA) special issue of ISAAC 2014, 26(03n04):135-149, 2017.
21. *Area-Preserving Simplification and Schematization of Polygonal Subdivisions*
K. Buchin, W. Meulemans, A. van Renssen, and B. Speckmann.
ACM Transactions on Spatial Algorithms and Systems (ACM TSAS), 2(1):2:1-2:36, 2016.
22. *Towards Tight Bounds on Theta-Graphs: More is not Always Better*
P. Bose, J.-L. De Carufel, P. Morin, A. van Renssen, and S. Verdonschot.
Theoretical Computer Science (TCS), 616:70-93, 2016.
23. *Optimal local routing on Delaunay triangulations defined by empty equilateral triangles*
P. Bose, R. Fagerberg, A. van Renssen, and S. Verdonschot.
SIAM Journal on Computing (SICOMP), 44(6):1626-1649, 2015.
24. *New and Improved Spanning Ratios for Yao Graphs*
L. Barba, P. Bose, M. Damian, R. Fagerberg, W. L. Keng, J. ORourke, A. van Renssen, P. Taslakian, S. Verdonschot, and G. Xia.
Journal of Computational Geometry (JoCG) special issue for SoCG 2014, 6(2):19-53, 2015.

25. *The θ_5 -graph is a spanner*
P. Bose, P. Morin, A. van Renssen, and S. Verdonschot.
Computational Geometry: Theory and Applications (CGTA), 48(2):108-119, 2015.
26. *Theta-3 is connected*
O. Aichholzer, S. W. Bae, L. Barba, P. Bose, M. Korman, A. van Renssen, P. Taslakian, and S. Verdonschot.
Computational Geometry: Theory and Applications (CGTA) special issue for CCCG 2013, 47(9):910-917, 2014.
27. *Making triangulations 4-connected using flips*
P. Bose, D. Jansens, A. van Renssen, M. Saumell, and S. Verdonschot.
Computational Geometry: Theory and Applications (CGTA) special issue for CCCG 2011, 47(2, Part A):187-197, 2014.

PEER REVIEWED CONFERENCE PAPERS

28. *Routing on the Visibility Graph*
P. Bose, M. Korman, A. van Renssen, and S. Verdonschot.
In Proceedings of the 28th International Symposium on Algorithms and Computation (ISAAC 2017), volume 92 of Leibniz International Proceedings in Informatics, pages 18:1-18:12, 2017.
29. *Routing in Polygonal Domains*
B. Banyassady, M.-K. Chiu, M. Korman, W. Mulzer, A. van Renssen, M. Roeloffzen, P. Seiferth, Y. Stein, B. Vogtenhuber, and M. Willert.
In Proceedings of the 28th International Symposium on Algorithms and Computation (ISAAC 2017), volume 92 of Leibniz International Proceedings in Informatics, pages 10:1-10:13, 2017.
30. *Fully-Dynamic and Kinetic Conflict-Free Coloring of Intervals with Respect to Points*
M. de Berg, T. Leijssen, A. Markovic, A. van Renssen, M. Roeloffzen, and G. Woeginger.
In Proceedings of the 28th International Symposium on Algorithms and Computation (ISAAC 2017), volume 92 of Leibniz International Proceedings in Informatics, pages 26:1-26:13, 2017.
31. *Faster Algorithms for Growing Prioritized Disks and Rectangles*
H.-K. Ahn, S. W. Bae, J. Choi, M. Korman, W. Mulzer, E. Oh, J.-w. Park, A. van Renssen, and A. Vigneron.
In Proceedings of the 28th International Symposium on Algorithms and Computation (ISAAC 2017), volume 92 of Leibniz International Proceedings in Informatics, pages 3:1-3:13, 2017.
32. *Constrained Routing Between Non-Visible Vertices*
P. Bose, M. Korman, A. van Renssen, and S. Verdonschot.
In Proceedings of the 23rd Annual International Computing and Combinatorics Conference (COCOON 2017), volume 10392 of Lecture Notes in Computer Science, pages 62-74, 2017.
33. *Dynamic Graph Coloring*
L. Barba, J. Cardinal, M. Korman, S. Langerman, A. van Renssen, M. Roeloffzen, and S. Verdonschot.
In Proceedings of the 15th Algorithms and Data Structures Symposium (WADS 2017), volume 10389 of Lecture Notes in Computer Science, pages 97-108, 2017.
34. *Balanced Line Separators of Unit Disk Graphs*
P. Carmi, M.-K. Chiu, M. Katz, M. Korman, Y. Okamoto, A. van Renssen, M. Roeloffzen, T. Shiitada, and S. Smorodinsky.
In Proceedings of the 15th Algorithms and Data Structures Symposium (WADS 2017), volume 10389 of Lecture Notes in Computer Science, pages 241-252, 2017.
35. *Snipperclips: Cutting Tools into Desired Polygons using Themselves*
E. D. Demaine, M. Korman, A. van Renssen, and M. Roeloffzen.
In Proceedings of the 29th Canadian Conference on Computational Geometry (CCCG 2017), pages 56-61, 2017.
36. *Improved Time-Space Trade-offs for Computing Voronoi Diagrams*
B. Banyassady, M. Korman, W. Mulzer, A. van Renssen, M. Roeloffzen, P. Seiferth, and Y. Stein.
In Proceedings of the 34th International Symposium on Theoretical Aspects of Computer Science (STACS 2017), volume 66 of Leibniz International Proceedings in Informatics, pages 9:1-9:14, 2017.

37. *Packing Short Plane Spanning Trees in Complete Geometric Graphs*
O. Aichholzer, T. Hackl, M. Korman, A. Pilz, G. Rote, A. van Renssen, M. Roeloffzen, and B. Vogtenhuber.
In Proceedings of the 27th International Symposium on Algorithms and Computation (ISAAC 2016), volume 64 of Leibniz International Proceedings in Informatics, pages 9:1-9:12, 2016.
38. *Symmetric Assembly Puzzles are Hard, Beyond a Few Pieces*
E. D. Demaine, M. Korman, J. S. Ku, J. Mitchell, Y. Otachi, A. van Renssen, M. Roeloffzen, R. Uehara, and Y. Uno.
In Proceedings of the Proceedings-version of the 18th Japan Conference on Discrete and Computational Geometry and Graphs (JCDCG² 2015), volume 9943 of Lecture Notes in Computer Science, pages 180-192, 2016.
39. *Constrained Generalized Delaunay Graphs Are Plane Spanners*
P. Bose, J.-L. De Carufel, and A. van Renssen.
In Proceedings of the Computational Intelligence in Information Systems (CIIS 2016), volume 532 of Advances in Intelligent Systems and Computing, pages 281-293, 2016.
40. *On interference among moving sensors and related problems*
J.-L. De Carufel, M. Katz, M. Korman, A. van Renssen, M. Roeloffzen, and S. Smorodinsky.
In Proceedings of the 24th European Symposium on Algorithms (ESA 2016), volume 57 of Leibniz International Proceedings in Informatics, pages 34:1-34:11, 2016.
41. *Time-Space Trade-offs for Triangulating a Simple Polygon*
B. Aronov, M. Korman, S. Pratt, A. van Renssen, and M. Roeloffzen.
In Proceedings of the 15th Scandinavian Symposium and Workshops on Algorithm Theory (SWAT 2016), volume 53 of Leibniz International Proceedings in Informatics, pages 30:1-30:12, 2016.
42. *Hanabi is NP-complete, Even for Cheaters who Look at Their Cards*
J.-F. Baffier, M.-K. Chiu, Y. Diez, M. Korman, V. Mitsou, A. van Renssen, M. Roeloffzen, and Y. Uno.
In Proceedings of the 8th International Conference on Fun with Algorithms (FUN 2016), volume 49 of Leibniz International Proceedings in Informatics, pages 4:1-4:17, 2016.
43. *Competitive Local Routing with Constraints*
P. Bose, R. Fagerberg, A. van Renssen, and S. Verdonschot.
In Proceedings of the 26th International Symposium on Algorithms and Computation (ISAAC 2015), volume 9472 of Lecture Notes in Computer Science, pages 23-34, 2015.
44. *Upper and Lower Bounds for Online Routing on Delaunay Triangulations*
N. Bonichon, P. Bose, J.-L. De Carufel, L. Perković, and A. van Renssen.
In Proceedings of the 23rd European Symposium on Algorithms (ESA 2015), volume 9294 of Lecture Notes in Computer Science, pages 203-214, 2015.
45. *Constrained Empty-Rectangle Delaunay Graphs*
P. Bose, J.-L. De Carufel, and A. van Renssen.
In Proceedings of the 27th Canadian Conference on Computational Geometry (CCCG 2015), pages 57-62, 2015.
46. *Time-Space Trade-offs for Triangulations and Voronoi Diagrams*
M. Korman, W. Mulzer, A. van Renssen, M. Roeloffzen, P. Seiferth, and Y. Stein.
In Proceedings of the 14th Algorithms and Data Structures Symposium (WADS 2015), volume 9214 of Lecture Notes in Computer Science, pages 482-492, 2015.
47. *The Price of Order*
P. Bose, P. Morin, and A. van Renssen.
In Proceedings of the 25th International Symposium on Algorithms and Computation (ISAAC 2014), volume 8889 of Lecture Notes in Computer Science, pages 313-325, 2014.
48. *Continuous Yao Graphs*
L. Barba, P. Bose, J.-L. De Carufel, M. Damian, R. Fagerberg, A. van Renssen, P. Taslakian, and S. Verdonschot.
In Proceedings of the 26th Canadian Conference on Computational Geometry (CCCG 2014), pages 100-106, 2014.

49. *On the Spanning Ratio of Constrained Yao-Graphs*
A. van Renssen.
In Proceedings of the 26th Canadian Conference on Computational Geometry (CCCG 2014), pages 239-243, 2014.
50. *New and Improved Spanning Ratios for Yao Graphs*
L. Barba, P. Bose, M. Damian, R. Fagerberg, W. L. Keng, J. O'Rourke, A. van Renssen, P. Taslakian, S. Verdonschot, and G. Xia.
In Proceedings of the 30th Annual Symposium on Computational Geometry (SoCG 2014), pages 30-39, 2014.
51. *Upper Bounds on the Spanning Ratio of Constrained Theta-Graphs*
P. Bose and A. van Renssen.
In Proceedings of the 11th Latin American Symposium on Theoretical Informatics (LATIN 2014), volume 8392 of Lecture Notes in Computer Science, pages 108-119, 2014.
52. *On the stretch factor of the Theta-4 graph*
L. Barba, P. Bose, J.-L. De Carufel, A. van Renssen, and S. Verdonschot.
In Proceedings of the 13th Algorithms and Data Structures Symposium (WADS 2013), volume 8037 of Lecture Notes in Computer Science, pages 109-120, 2013.
53. *On the Spanning Ratio of Theta-Graphs*
P. Bose, A. van Renssen, and S. Verdonschot.
In Proceedings of the 13th Algorithms and Data Structures Symposium (WADS 2013), volume 8037 of Lecture Notes in Computer Science, pages 182-194, 2013.
54. *Theta-3 is connected*
O. Aichholzer, S. Bae, L. Barba, P. Bose, M. Korman, A. van Renssen, P. Taslakian, and S. Verdonschot.
In Proceedings of the 25th Canadian Conference on Computational Geometry (CCCG 2013), pages 205-210, 2013.
55. *The θ_5 -graph is a spanner*
P. Bose, P. Morin, A. van Renssen, and S. Verdonschot.
In Proceedings of the 39th International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2013), volume 8165 of Lecture Notes in Computer Science, pages 100-114, 2013.
56. *Optimal Bounds on Theta-Graphs: More is not Always Better*
P. Bose, J.-L. De Carufel, P. Morin, A. van Renssen, and S. Verdonschot.
In Proceedings of the 24th Canadian Conference on Computational Geometry (CCCG 2012), pages 305-310, 2012.
57. *Competitive Routing on a Bounded-Degree Plane Spanner*
P. Bose, R. Fagerberg, A. van Renssen, and S. Verdonschot.
In Proceedings of the 24th Canadian Conference on Computational Geometry (CCCG 2012), pages 299-304, 2012.
58. *On Plane Constrained Bounded-Degree Spanners*
P. Bose, R. Fagerberg, A. van Renssen, and S. Verdonschot.
In Proceedings of the 10th Latin American Symposium on Theoretical Informatics (LATIN 2012), volume 7256 of Lecture Notes in Computer Science, pages 85-96, 2012.
59. *Competitive Routing in the Half- θ_6 -Graph*
P. Bose, R. Fagerberg, A. van Renssen, and S. Verdonschot.
In Proceedings of the 23rd ACM-SIAM Symposium on Discrete Algorithms (SODA 2012), pages 1319-1328, 2012.
60. *The 2×2 Simple Packing Problem*
A. van Renssen and B. Speckmann.
In Proceedings of the 23rd Canadian Conference on Computational Geometry (CCCG 2011), pages 387-392, 2011.

61. *Making triangulations 4-connected using flips*
P. Bose, D. Jansens, A. van Renssen, M. Saumell, and S. Verdonchot.
In Proceedings of the 23rd Canadian Conference on Computational Geometry (CCCG 2011), pages 241–247, 2011.
62. *Area-Preserving Subdivision Schematization*
W. Meulemans, A. van Renssen, and B. Speckmann.
In Proceedings of the 6th International Conference on Geographic Information Science (GIScience 2010), volume 6292 of Lecture Notes in Computer Science, pages 160–174, 2010.

OTHER PUBLICATIONS

63. *Rectilinear Link Diameter and Radius in a Rectilinear Polygonal Domain*
M.-K. Chiu, E. Khramtcova, A. Markovic, Y. Okamoto, A. Ooms, A. van Renssen, and M. Roeloffzen.
Accepted to 34th European Workshop on Computational Geometry (EuroCG 2018).
64. *Routing in Polygonal Domains*
B. Banyassady, M. Korman, W. Mulzer, A. van Renssen, M. Roeloffzen, P. Seiferth, Y. Stein, B. Vogtenhuber, and M. Willert.
20th Japan Conference on Discrete and Computational Geometry, Graphs, and Games (JCDCG³ 2017), pages 88-89, 2017.
65. *Kinetic All-Pairs Shortest Path in a Simple Polygon*
Y. Diez, M. Korman, A. van Renssen, M. Roeloffzen, and F. Staals.
33rd European Workshop on Computational Geometry (EuroCG 2017), pages 21-24, 2017.
66. *A Lower Bound for the Dynamic Conflict-Free Coloring of Intervals with Respect to Points*
M. de Berg, T. Leijssen, A. Markovic, A. van Renssen, M. Roeloffzen, and G. Woeginger.
33rd European Workshop on Computational Geometry (EuroCG 2017), pages 185-188, 2017.
67. *Routing in Simple Polygons*
M. Korman, W. Mulzer, A. van Renssen, M. Roeloffzen, P. Seiferth, Y. Stein, B. Vogtenhuber, and M. Willert.
33rd European Workshop on Computational Geometry (EuroCG 2017), pages 17-20, 2017.
68. *Constrained Generalized Delaunay Graphs Are Plane Spanners*
P. Bose, J.-L. De Carufel, and A. van Renssen.
9th Annual Meeting of the Asian Association for Algorithms and Computation (AAAC 2016).
69. *Time-Space Trade-offs for Triangulating a Simple Polygon*
B. Aronov, M. Korman, S. Pratt, A. van Renssen, and M. Roeloffzen.
32nd European Workshop on Computational Geometry (EuroCG 2016), 2016.
70. *On Kinetic Range Spaces and their Applications*
J.-L. De Carufel, M. Katz, M. Korman, A. van Renssen, M. Roeloffzen, and S. Smorodinsky.
32nd European Workshop on Computational Geometry (EuroCG 2016), 2016.
71. *Time-Space Trade-offs for Triangulating a Simple Polygon*
B. Aronov, M. Korman, S. Pratt, A. van Renssen, and M. Roeloffzen.
Fall Workshop on Computational Geometry (FWCG 2015), 2015.
72. *Symmetric Assembly Puzzles are Hard, Beyond a Few Pieces*
E. D. Demaine, M. Korman, J. S. Ku, J. Mitchell, Y. Otachi, A. van Renssen, M. Roeloffzen, R. Uehara, and Y. Uno.
18th Japan Conference on Discrete and Computational Geometry and Graphs (JCDCG² 2015), 2015.
73. *Constrained Generalized Delaunay Graphs Are Plane Spanners*
P. Bose, J.-L. De Carufel, and A. van Renssen.
31st European Workshop on Computational Geometry (EuroCG 2015), pages 176-179, 2015.
74. *Time-Space Trade-offs for Voronoi Diagrams*
M. Korman, W. Mulzer, A. van Renssen, M. Roeloffzen, P. Seiferth, and Y. Stein.
31st European Workshop on Computational Geometry (EuroCG 2015), pages 248-251, 2015.

75. *New and Improved Stretch Factors of Yao Graphs*
L. Barba, P. Bose, M. Damian, R. Fagerberg, W. L. Keng, J. O'Rourke, A. van Renssen, P. Taslakian, S. Verdonschot, and G. Xia.
Fall Workshop on Computational Geometry (FWCG 2013), 2013.
76. *On utilization bounds for a periodic resource under rate monotonic scheduling*
A. van Renssen, S. Geuns, J. Hausmans, W. Poncin, and R. Bril.
In Proceedings of the Work-in-Progress session of the 21st Euromicro Conference on Real-Time Systems (ECRTS 2009), pages 25–28, 2009.

THESES

77. *Theta-Graphs and Other Constrained Spanners*
A. van Renssen.
PhD thesis, Carleton University, 2014.
78. *The 2×2 Simple Packing Problem*
A. van Renssen.
Master's thesis, Technische Universiteit Eindhoven, 2010.

INVITED TALKS

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| NOV. 2017 | <i>Routing on the Visibility Graph</i>
Shonan Meeting 106: Geometric Graphs - Theory and Applications, Shonan, Japan. |
| JUL. 2017 | <i>Packing Short Plane Spanning Trees in Complete Geometric Graphs</i>
Computational Geometry Lab Seminar, Carleton University, Ottawa, Canada. |
| MAY 2016 | <i>Routing Among Obstacles</i>
National Cheng Kung University, Tainan, Taiwan. |
| MAY 2016 | <i>Time-Space Trade-offs for Triangulating a Simple Polygon</i>
2016 Bilateral Workshop National Chi Nan University and Tohoku University, National Chi Nan University, Nantou, Taiwan. |
| AUG. 2015 | <i>Competitive Local Routing with Constraints</i>
Computational Geometry Lab Seminar, Carleton University, Ottawa, Canada. |
| JUN. 2015 | <i>Competitive Local Routing with Constraints</i>
Geometric Networks Workshop of the 31st International Symposium on Computational Geometry (SoCG 2015), Eindhoven, the Netherlands. |
| JAN. 2015 | <i>Spanners: Constructing a Network with Few Edges</i>
2nd Japan-Korea Joint Workshop on General Optimization: Polygon Containment, Packing and Alignment, Zao, Japan. |

CONFERENCE PRESENTATIONS

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| DEC. 2017 | <i>Routing on the Visibility Graph</i>
28th International Symposium on Algorithms and Computation (ISAAC 2017), Phuket, Thailand. |
| AUG. 2017 | <i>Constrained Routing Between Non-Visible Vertices</i>
23rd Annual International Computing and Combinatorics Conference (COCOON 2017), Hong Kong. |
| JUL. 2017 | <i>Snipperclips: Cutting Tools into Desired Polygons using Themselves</i>
29th Canadian Conference on Computational Geometry (CCCG 2017), Ottawa, Canada. |
| APR. 2017 | <i>Kinetic All-Pairs Shortest Path in a Simple Polygon</i>
33rd European Workshop on Computational Geometry (EuroCG 2017), Malmö, Sweden. |

NOV. 2016	<i>Constrained Generalized Delaunay Graphs Are Plane Spanners</i> Computational Intelligence in Information Systems (CIIS 2016), Bandar Seri Begawan, Brunei.
JUN. 2016	<i>Time-Space Trade-offs for Triangulating a Simple Polygon</i> 5th Scandinavian Symposium and Workshops on Algorithm Theory (SWAT 2016), Reykjavik, Iceland.
MAY 2016	<i>Constrained Generalized Delaunay Graphs Are Plane Spanners</i> 9th Annual Meeting of the Asian Association for Algorithms and Computation (AAAC 2016), Taipei, Taiwan.
DEC. 2015	<i>Competitive Local Routing with Constraints</i> 26th International Symposium on Algorithms and Computation (ISAAC 2015), Nagoya, Japan.
AUG. 2015	<i>Constrained Empty-Rectangle Delaunay Graphs</i> 27th Canadian Conference on Computational Geometry (CCCG 2015), Kingston, Canada.
MAR. 2015	<i>Constrained Generalized Delaunay Graphs Are Plane Spanners</i> 31st European Workshop on Computational Geometry (EuroCG 2015), Ljubljana, Slovenia.
DEC. 2014	<i>The Price of Order</i> 25th International Symposium on Algorithms and Computation (ISAAC 2014), Jeonju, Korea.
AUG. 2014	<i>On the Spanning Ratio of Constrained Yao-Graphs</i> 26th Canadian Conference on Computational Geometry (CCCG 2014), Halifax, Canada.
AUG. 2014	<i>Computing the Geodesic Centers of a Polygonal Domain</i> By: Sang Won Bae, Matias Korman, and Yoshio Okamoto. 26th Canadian Conference on Computational Geometry (CCCG 2014), Halifax, Canada.
MAR. 2014	<i>Upper Bounds on the Spanning Ratio of Constrained Theta-Graphs</i> 11th Latin American Symposium on Theoretical Informatics (LATIN 2014), Montevideo, Uruguay.
AUG. 2013	<i>On the Spanning Ratio of Theta-Graphs</i> 13th Algorithms and Data Structures Symposium (WADS 2013), London, Canada.
AUG. 2012	<i>Optimal Bounds on Theta-Graphs: More is not Always Better</i> 24th Canadian Conference on Computational Geometry (CCCG 2012), Charlottetown, Canada.
JAN. 2012	<i>Competitive Routing in the Half-θ_6-Graph</i> 23rd ACM-SIAM Symposium on Discrete Algorithms (SODA 2012), Kyoto, Japan.
AUG. 2011	<i>The 2×2 Simple Packing Problem</i> 23rd Canadian Conference on Computational Geometry (CCCG 2011), Toronto, Canada.
JUL. 2009	<i>On utilization bounds for a periodic resource under rate monotonic scheduling</i> Work-in-Progress (WiP) session of the 21st Euromicro Conference on Real-Time Systems (ECRTS 2009), Dublin, Ireland.

PROGRAM COMMITTEES

I have been part of the following program committees.

- 34th European Workshop on Computational Geometry (EuroCG 2018)
- 28th Canadian Conference on Computational Geometry (CCCG 2016)
- 2nd Young Researcher Workshop on Automata, Languages and Programming (YR-ICALP 2015)

REVIEWS

I have reviewed papers for the following journals and conferences.

JOURNALS

- Computational Geometry: Theory & Applications (CGTA)
- Information Processing Letters (IPL)
- International Journal of Computational Geometry & Applications (IJCGA)
- Journal of Computational Geometry (JoCG)
- Journal of Information Processing (JIP)
- Journal of the Operations Research Society of Japan (JORSJ)
- Theoretical Computer Science (TCS)

CONFERENCES

- ACM-SIAM Symposium on Discrete Algorithms (SODA)
- Canadian Conference on Computational Geometry (CCCG)
- European Symposium on Algorithms (ESA)
- European Workshop on Computational Geometry (EuroCG)
- IEEE Symposium on Foundations of Computer Science (FOCS)
- International Colloquium on Automata, Languages, and Programming (ICALP)
- International Conference on Combinatorial Optimization and Applications (COCOA)
- International Symposium on Algorithms and Computation (ISAAC)
- International Symposium on Algorithms and Experiments for Wireless Sensor Networks (ALGO-SENSORS)
- International Symposium on Combinatorial Optimization (ISCO)
- International Symposium on Computational Geometry (SoCG)
- International Symposium on Graph Drawing and Network Visualization (GD)
- International Symposium on Theoretical Aspects of Computer Science (STACS)
- Japan Conference on Discrete and Computational Geometry and Graphs (JCDCG²)
- Scandinavian Symposium and Workshops on Algorithm Theory (SWAT)

RESEARCH VISITS

JUL. 2017	Computational Geometry Lab, Carleton University, Ottawa, Canada.
APR. 2017	MADALGO, Aarhus University, Aarhus, Denmark.
JUN. 2016	Computer Science and Artificial Intelligence Laboratory, Massachusetts Institute of Technology, Cambridge, United States.
MAR. 2016	Faculty of Informatics, Università della Svizzera Italiana, Lugano, Switzerland.
AUG. 2015	Computational Geometry Lab, Carleton University, Ottawa, Canada.
JUN. 2015	Algorithms Group, Technische Universiteit Eindhoven, Eindhoven, the Netherlands.
APR. 2015	Algorithms Research Group, Université Libre de Bruxelles, Brussels, Belgium.
MAR. 2015	Institute for Software Technology, Graz University of Technology, Graz, Austria.
JAN. 2015	Hokkaido University, Sapporo, Japan.

ATTENDED WORKSHOPS

NOV. 2017	Shonan Meeting 106: Geometric Graphs - Theory and Applications, Shonan, Japan.
APR. 2017	Dagstuhl Seminar 17171: Computational Geometry, Dagstuhl, Germany.
JAN. 2017	32nd Bellairs Winter Workshop on Computational Geometry, Holetown, Barbados.
JAN. 2017	20th Korean Workshop on Computational Geometry, Zao, Japan.

DEC. 2016	Sydney Algorithms Workshop 2016, Sydney, Australia.
NOV. 2016	Shonan Meeting 089: Algorithmics for Beyond Planar Graphs, Shonan, Japan.
MAY 2016	Shonan Meeting 079: Theory and Applications of Geometric Optimization, Shonan, Japan.
MAY 2016	Bilateral Workshop between Tohoku University and National Tsing Hua University, Tainan, Taiwan.
APR. 2016	Dutch-Japanese Bilateral Seminar on Kinetic Geometric Networks, Zao, Japan.
JAN. 2016	3rd Japan-Korea Joint Workshop on Computational Geometry, Zao, Japan.
DEC. 2015	3rd Sendai Winter Workshop on Discrete and Computational Geometry, Sendai, Japan.
JUN. 2015	18th Korean Workshop on Computational Geometry, Otaru, Japan.
FEB. 2015	2nd Sendai Winter Workshop on Discrete and Computational Geometry, Sendai, Japan.
JAN. 2015	2nd Japan-Korea Joint Workshop on General Optimization: Polygon Containment, Packing and Alignment, Zao, Japan.
JUN. 2014	Sendai Workshop on Discrete and Computational Geometry, Sendai, Japan.
MAR. 2013	Workshop on Geometry and Geometric Graph Theory, Holetown, Barbados.
AUG. 2012	20th Korean Workshop on Computational Geometry, Ottawa, Canada.

HOSTED RESEARCHERS

FEB. 2018	Dr. Frank Staals, Utrecht University, Utrecht, the Netherlands.
NOV. 2017	Prof. Evanthia Papadopoulou & Martin Suderland, Università della Svizzera italiana, Lugano, Switzerland.
SEP. 2017	Dr. Elena Khramtcova & Aurélien Ooms, Université Libre de Bruxelles, Brussels, Belgium.
SEP. 2017	Prof. Yoshio Okamoto, University of Electro-Communications, Tokyo, Japan.
MAY - JUL. 2017	Aleksandar Markovic, Technische Universiteit Eindhoven, Eindhoven, the Netherlands.
JUN. 2017	Prof. Robert Martí, Universitat de Girona, Girona, Spain.
APR. 2017	Mikkel Abrahamsen, University of Copenhagen, Copenhagen, Denmark.
MAR. 2017	Hugo Akitaya, Tufts University, Boston, United States.
FEB. 2017	Prof. Wolfgang Mulzer, Bahareh Banyassady & Max Willert, Freie Universität Berlin, Berlin, Germany.
OCT. 2016	Dr. Frank Staals, Aarhus University, Aarhus, Denmark.
JUL. 2016	Dr. Darren Strash, Karlsruhe Institute of Technology, Karlsruhe, Germany.
MAY 2016	Prof. Boris Aronov, New York University, New York, United States.
APR. - MAY 2016	Aleksandar Markovic, Technische Universiteit Eindhoven, Eindhoven, the Netherlands.
MAR. 2016	Prof. Wolfgang Mulzer, Paul Seiferth & Yannik Stein, Freie Universität Berlin, Berlin, Germany.
MAR. 2016	Prof. Birgit Vogtenhuber, Graz University of Technology, Graz, Austria.
FEB. 2016	Prof. Jean-Lou De Carufel, University of Ottawa, Ottawa, Canada.
FEB. 2016	Prof. Paz Carmi, Prof. Matthew Katz & Prof. Shakhar Smorodinsky, Ben-Gurion University of the Negev, Beer-Sheva, Israel.
JAN. 2016	Ji-won Park, Korea Advanced Institute of Science and Technology, Daejeon, Korea.
JAN. 2016	Luis Barba, Carleton University, Ottawa, Canada.
JAN. 2016	Dr. Sander Verdonschot, University of Ottawa, Ottawa, Canada.
DEC. 2015	Prof. Sui-Wing Cheng, Hong Kong University of Science & Technology, Hong Kong.
DEC. 2015	Jason Ku, Massachusetts Institute of Technology, Cambridge, United States.

NOV. 2015	Dr. Pierre-Louis Poirion, Paris Institute of Technology, Paris, France.
SEP. 2015	Prof. José Portillo, Universidad de Sevilla, Sevilla, Spain.
AUG. 2015	Prof. Yi-Yung Chen, National Cheng Kung University, Tainan, Taiwan.
JUL. 2015	Simon Pratt, University of Waterloo, Waterloo, Canada.
JUL. 2015	Prof. Boris Aronov, New York University, New York, United States.
MAY 2015	Prof. Matt Gibson, University of Texas, San Antonio, United States.
APR. 2015	Dr. Man-Kwun Chiu, Hong Kong University of Science & Technology, Hong Kong.
MAR. 2015	Dr. Jean-François Baffier, University of Tokyo, Japan.
FEB. 2015	Prof. Matthew Katz & Prof. Shakhar Smorodinsky, Ben-Gurion University of the Negev, Beer-Sheva, Israel.
FEB. 2015	Dr. Jean-Lou De Carufel, Carleton University, Ottawa, Canada.

ORGANIZATIONAL SKILLS

DEC. 2014	-	In charge of the administration for international visitors <i>Duties include: collecting and processing the documentation required for international visitors to the Tokuyama Laboratory at Tohoku University.</i>
SEPT. 2011	- SEPT. 2014	Executive of Anime@Carleton, the Carleton University anime club <i>Duties include: administrative tasks such as booking rooms for showings and handling the certification paperwork, deciding on a schedule the showings, and recruitment of new members.</i>
JAN. 2013	- AUG. 2014	In charge of the weekly Computational Geometry Seminar at Carleton University <i>Duties include: making the seminar schedule and booking the seminar room.</i>
	MAY 2014	Staff at Anime North, an Anime Convention held in Toronto <i>Activities included: Setting up audiovisual equipment for various events.</i>
	NOV. 2013	Staff at N2U, an Anime Convention held in Ottawa <i>Activities included: in charge of setting up most of the audiovisual equipment, helping out backstage at the Masquerade (the cosplay contest), and transporting the Manga Library (approximately 6000 books), and preparing rooms for various other events.</i>
	MAY 2013	Staff at Anime North, an Anime Convention held in Toronto <i>Activities included: Setting up audiovisual equipment for various events.</i>
	NOV. 2012	Staff at N2U, an Anime Convention held in Ottawa <i>Activities included: setting up the Manga Library (approximately 5500 books), helping out backstage at the Masquerade (the cosplay contest), and preparing rooms for various other events (including setting up audiovisual equipment).</i>
	NOV. 2012	Co-Organizer of the Japan Animation Film Festival <i>The event was organized by the Embassy of Japan, the Japan Foundation, the School of Linguistics and Language Studies, Anime@Carleton, and the Carleton University Japan Association.</i>

OTHER EXTRACURRICULAR ACTIVITIES

AUG. 2015	-	NOV. 2015	Reviewer for activeAnime, an anime news and review website
FEB. 2013	-	AUG. 2014	

LANGUAGE SKILLS

DUTCH: Mother Tongue
ENGLISH: Fluent
GERMAN: Intermediate
JAPANESE: Intermediate
FRENCH: Basic